

Appl. No.: 10/827,077
Amdt. dated 03/01/2006
Reply to Office action of December 13, 2005

REMARKS/ARGUMENTS

This amendment is responsive to the Office Action dated December 13, 2005. Applicants would like to thank the Examiner for a timely and thorough review of the above-referenced patent application. Claims 1-18 were previously pending in the application. Claims 1-18 are rejected. Applicants have amended Claims 1, 3, 4, 10, 12, and 13 to more clearly define the invention, as explained more fully below. Applicants have also canceled Claims 2 and 11. It is respectfully submitted that, in light of the arguments and claim amendments, all of the claims are now in condition for allowance.

Objection to Specification

The Office Action objected to the specification based upon an informality on page 1, line 18. Applicants have amended the specification to include the language recommended in the Office Action. Accordingly, Applicants respectfully request that the objection to the specification be withdrawn.

Objection to Claim 10

The Office Action objected to Claim 10 based upon an informality in the third line of Claim 10. Applicants have amended Claim 10 to include the language recommended in the Office Action. Accordingly, Applicants respectfully request that the objection to Claim 10 be withdrawn.

Rejections Under 35 USC § 102(b) As Being Anticipated by Hall '659 Patent

The Office Action rejected Claims 1 and 5-9 are rejected under 35 USC 102(b) as being anticipated by U.S. Patent No. 4,478,659 to Hall ("the Hall '659 patent"). To the extent that these rejections would be applied against the claims as amended, Applicants respectfully traverse.

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The Hall '659 patent discloses upper and lower welding units 10 and 20 between which non-magnetic material may be inserted and welded together. The lower welding unit 20 includes a knurled or serrated wheel 24 that "ensures that the two sheets of material are brought into sufficiently close contact with the welding head 12." See Col. 2, lines 44-47 of the Hall '659 patent. The welding units 10 and 20 of the Hall '659 patent also include magnets 14, 16, 26, and 28 to keep the welding units in relative position.

Applicants have amended Claim 1, from which Claims 5-9 depend, to include the recitation that the "ferromagnetic device defines a generally spherical outer surface" that was previously recited in Claim 2, which Applicants have cancelled. The Hall '659 patent fails to disclose or suggest a ferromagnetic device with a generally spherical outer surface, as the magnets of the Hall '659 patent have generally flat outer surfaces and the wheel of the Hall '659 patent has a knurled or serrated surface, which is non-spherical. For at least this reason, Applicants respectfully submit that the Hall '659 patent fails to disclose or suggest an ultrasonic welding apparatus with a ferromagnetic device that defines a generally spherical outer surface, as recited in amended Claim 1, from which Claims 5-9 depend. Accordingly, Applicants respectfully request that the rejections of Claims 1 and 5-9 be withdrawn.

Rejections Under 35 USC § 103(a) As Being Unpatentable over Wannebo '987 Patent in view of Garrigus '928 Patent

The Office Action rejected Claims 1-18 under 35 USC 103(a) as being unpatentable over U.S. Patent No. 5,749,987 to Wannebo ("the Wannebo '987 patent") in view of U.S. Patent No. 6,180,928 to Garrigus ("the Garrigus '928 patent"). To the extent that these rejections would be applied against the claims as amended, Applicants respectfully traverse.

The Wannebo '987 patent discloses an ultrasonic welding unit 1 that includes an ultrasonic horn 2 and an anvil roll 3 between which the material 5, 6 to be welded is moved. Applicants respectfully disagree with the Office Action's characterization that the anvil roll 3 of the Wannebo '987 patent discloses a generally spherical outer surface. Rather, Applicants respectfully submit that the anvil roll 3 of the Wannebo '987 patent is non-spherical in that the anvil roll "has a number of anvil forming projections 4 disposed in a selected pattern on its

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peripheral surface.” Col. 2, lines 20-22 of the Wannebo ‘987 patent. Turning now to the Garrigus ‘928 patent, a rare earth metal switched magnetic device is disclosed, wherein the device may serve as a magnetic clamp for applying orthogonal pressure to a part that may be formed of one or more pieces. One or more magnets are provided on one side of the part, and a rare earth metal plate is located on an opposite side of the part. Pressure on the part can be applied or released based upon the temperature of the rare earth metal. The magnets and rare earth metals of the Garrigus ‘928 patent define generally flat surfaces for contacting the part to be clamped.

Applicants have amended Claims 1 and 10, from which Claims 3-9 and Claims 12-18 depend, respectively, to include the recitation that the “ferromagnetic device defines a generally spherical outer surface,” which was previously recited in Claims 2 and 11, respectively, which Applicants have cancelled. As discussed above, the Wannebo ‘987 patent fails to disclose or suggest a ferromagnetic device with a generally spherical outer surface, as the anvil roll of the Wannebo ‘987 patent includes a number of anvil forming projections disposed in a selected pattern on its peripheral surface. Likewise the Garrigus ‘928 patent fails to disclose or suggest a ferromagnetic device with a generally spherical outer surface, as the magnets and rare earth metals of the Garrigus ‘928 patent define generally flat surfaces. For at least this reason, Applicants respectfully submit that the Wannebo ‘987 patent in view of the Garrigus ‘928 patent fails to disclose or suggest an ultrasonic welding apparatus with a ferromagnetic device that defines a generally spherical outer surface, as recited in amended Claims 1 and 10, from which Claims 3-9 and Claims 12-18 depend, respectively. Accordingly, Applicants respectfully request that the rejections of Claims 1, 3-10, and 12-18 be withdrawn.

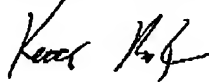
CONCLUSION

In view of the foregoing remarks, Applicant respectfully submits that all of the claims of the present application are in condition for allowance. It is respectfully requested that a Notice of Allowance be issued in due course. Examiner Aboagye is encouraged to contact Applicant’s undersigned attorney to resolve any remaining issues in order to expedite examination of the present application.

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It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

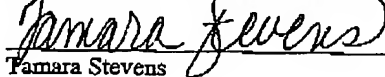


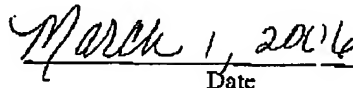
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Tamara Stevens


Date